

AMENDMENT TO THE CLAIMS

Claim 1 (currently amended): A method of fabricating an integrated device, the method comprising:

forming a transistor of an integrated device;
forming a first protective layer over a gate, source, and drain of the transistor; and
forming a micro-electro-mechanical system (MEMS) structure over the first protective layer, the MEMS structure including a movable element that is formed using a deposition process at a temperature greater than about 700°C;
forming a second protective layer over the MEMS structure;
wiring the transistor to allow electrical connection to the transistor; and
removing at least a portion of the second protective layer to expose the MEMS structure.

Claim 2 (canceled)

Claim 3 (original): The method of claim 1 wherein the movable element comprises a membrane of a capacitive micromachined ultrasonic transducer (CMUT).

Claim 4 (canceled)

Claim 5 (original): The method of claim 1 wherein the integrated device comprises a CMUT.

Claim 6 (original): The method of claim 1 wherein the deposition process comprises low-pressure chemical vapor deposition (LPCVD).

Claim 7 (original): The method of claim 1 further comprising:
suspending the movable element over a bottom electrode.

Claim 8 (original): The method of claim 7 wherein the bottom electrode comprises doped polysilicon.

Claim 9 (currently amended): A method of fabricating an integrated device, the method comprising:

forming a plurality of transistors of an integrated device;
forming a protective layer over the plurality of transistors after the plurality of transistors is formed;
forming a capacitive micromachined ultrasonic transducer (CMUT) over the protective layer, the CMUT including a membrane that is formed using a high temperature process performed at a temperature greater than 700°C, the plurality of transistors and the CMUT being formed on a same substrate; and
forming a second protective layer over the CMUT;

forming an interconnect line ~~electrically coupling the CMUT and to~~ a transistor in the plurality of transistors; and
removing at least a portion of the second protective layer to expose the CMUT.

Claim 10 (original): The method of claim 9 wherein the membrane is suspended over a gap.

Claim 11 (canceled)

Claim 12 (original): The method of claim 9 wherein the high temperature process comprises low pressure chemical vapor deposition (LPCVD).

Claim 13 (canceled)

Claim 14 (canceled)

Claim 15 (previously presented): The method of claim 9 further comprising:
wiring the CMUT using a low temperature process performed at a temperature lower than 700°C.

Claim 16 (original): The method of claim 15 wherein the low temperature process includes plasma processing.

Claims 17-20 (canceled)